

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to colleagues, clients or customers, or to license text, images or graphics, use the Reprints tool at the top of any article or visit: [Reprints \(http://www.newsweekdailybeastreprints.com\)](http://www.newsweekdailybeastreprints.com)



Remains of the Day

Nineteen hijackers died on 9/11. What should be done with what's left of them?

by [Eve Conant \(/contributors/eve-conant.html\)](http://www.thedailybeast.com/contributors/eve-conant.html) | January 2, 2009 7:00 PM EST

In the grim, sleepless months of excavation after the September 11 attacks, forensic pathologists in New York City worked day and night to identify the dead. They didn't have much to go on. The collapsed World Trade Center towers had burned at temperatures reaching 2,000 degrees, incinerating those trapped inside. Many of the bodies of the passengers aboard the two airplanes that struck the buildings were consumed by burning jet fuel, leaving only traces of DNA, much of it so damaged that it was impossible to read. Few bodies were found intact. Most of the human remains culled from the vast wreckage at Ground Zero were little more than tiny fragments of charred tissue and bone. The volume was overwhelming. Robert Shaler, who headed the city's Department of Forensic Biology and was a leader of the identification effort, worried his lab would be paralyzed if it tried to identify every piece. At first, they decided they would only attempt to test samples that were "the size of a thumb or larger," he says. But when they saw how small many of the fragments were, they changed their minds. "If we were really going to make an honest effort," Shaler says, "we had to do everything that came along."

Shaler and his colleagues at the Office of the Chief Medical Examiner gave weekly updates to family members of the victims, reporting how many of the dead had been identified and reassuring them that the city was doing everything to identify their loved ones. But the families weren't only concerned with their own dead. In meeting after meeting, Shaler says, relatives would ask about the hijackers. Had the scientists identified any of their remains?

"They did not want the terrorists mixed in with their loved ones," says Shaler. The families said, "These people were criminals and did not deserve to be with them." The families asked for the remains of the hijackers to be separated out and kept someplace else. Shaler shared their frustration. Now 66, his

hair and beard a grandfatherly white, Shaler says he could not always separate his duties as a scientist from his own emotions: a little more than a year into the investigation, he suffered a heart attack. At the early meetings, he told the families he didn't think it would be possible to sort out the remains; by the spring of 2002, Shaler and his staff of 105 scientists had yet to identify any of the New York hijackers. "I thought we'd never find remains from anyone on the planes," he says. But he promised to try.

The blunt reality is that no matter how fastidious their efforts, the scientists will never fully sort the victims from the hijackers. The fragments are too small, too ruined and too scattered for bodies to be restored in their entirety. Some were lost to fire or during the excavation of the wreckage. Today, 1,126 of the 2,751 victims from the World Trade Center and five individuals from the Pentagon have yet to be identified at all—none of their remains and no traces of their DNA have been found.

Scientists are still trying. More than seven years later, the effort continues to identify the missing victims—and hijackers. Shaler and his successors have fulfilled at least part of their promise to the families. Through a combination of innovative DNA-mapping techniques, help from the FBI's crime lab and dumb luck, the scientists have now ID'd four of the 10 New York hijackers. The remains of the nine hijackers from the Pentagon and Pennsylvania crash sites have also been confirmed; six other hijackers have yet to be identified.

What's left of the terrorists—which, all told, likely amounts to less than 24 pounds of flesh and bone fragments—are sequestered at undisclosed locations in New York and Virginia. They are "stored as evidence in a refrigerated locker in sealed containers and test tubes," says Richard Kolko, a spokesman for the FBI.

None of the families of the hijackers, and no foreign governments, have come forward to request that the remains be handed over, and it is not clear what the official response would be if they did. The U.S. government has not said what, if anything, it plans to do with them. "No determination has yet been made," says FBI spokesman Kolko. For now, they are being held as evidence in the still-open 9/11 investigation. Yet at some point, the investigation will be closed. The remains of the identified victims have been returned to their families; but what is to be done with the remnants of their killers?

In the late fall of 2001, as Shaler and his colleagues were engaged in the slow work of conducting DNA tests on the thousands of fragments from Ground Zero, pathologists at the Pennsylvania and Pentagon sites were moving much more quickly. Many of the remains were burned and badly damaged, but identifiable. In Pennsylvania, Somerset County coroner Wallace E. Miller and his team scoured the "halo"—the field and woods surrounding the crater left when United Airlines Flight 93 plunged into the ground. The debris was everywhere. Trees were draped with scraps of luggage, clothing, bits of the fuselage and human remains. Walking through the crash site in the days after the attacks, Miller's eye caught a flash of light 20 feet up in the branches of a hemlock tree. "I only noticed it because the sun happened to hit it at just the right angle," he says. A tree climber brought it down. It was a single tooth with a silver filling. Eventually it was matched to one of the passengers.

In the first two weeks after 9/11, Miller and his team identified 16 of the 44 passengers and crew aboard Flight 93 through fingerprint and dental records. For others, he turned to DNA testing. Hairbrushes and razors collected from the families of the victims provided DNA to match up with human

fragments pulled from the wrecked plane.

Like Shaler in New York, Miller met with families of the victims, and they, too, wanted to know if the remains of the hijackers were being sifted out. Miller explained to them that it wasn't as simple as that. There were still some 300 pounds of unidentified remains. Much of it had been damaged beyond recognition by exposure to air and 11,000 gallons of jet fuel. "I told them there would likely be terrorist remains interspersed with them," says Miller. "There were varying degrees of angst and anger about that."

Still, he did what he could to honor the request. Miller and his team sent fragments from the Pennsylvania crash site for testing at the Armed Forces DNA Identification Laboratory in Rockville, Md. "Our priority was not the hijackers, it was getting the victims back to their families," says Brion Smith, the lab's director. But the remains of the terrorists stood out. Four of the DNA profiles from the Pennsylvania crash site didn't match material provided by the families of passengers and crew. By simple process of elimination, Smith knew these were the hijackers. He sent the samples back to Miller along with the genetic codes.

It was just what Miller was hoping for. With those four profiles in hand, he could weed out the terrorists' remains. He went to the freezers, which were filled with thousands of painstakingly bagged and tagged human fragments retrieved from the crash. Miller scanned the icy plastic bags, looking for genetic profiles that matched Smith's data. He pulled out four bags and laid them on a large table. "All that remained of the four men was less than 10 pounds" of fragments, Miller says. "I had about 48 samples that were associated with the terrorists, mostly bony tissue and I think maybe some scalp with hair on it." He also couldn't tell which set of remains belonged to which terrorist. "Obviously none of the terrorists' families came forward with any information—they were like four John Does," says Miller. "So I just referred to them as Terrorist A, B, C and D."

In New York, efforts to identify the terrorists were more difficult. There were still too many victims who had not been identified by their DNA, making it impossible to flag the terrorists by a process of elimination. The scientists needed the DNA profiles from the hijackers. Shaler's office turned to the FBI for help. The request made its way to the desk of Alan Giusti, the lab's forensic examiner in charge of the September 11 investigation. As it turned out, Giusti had worked for Shaler at a private DNA lab in the '80s, when the technology was in its infancy. Now Giusti was spending his days using genetic clues to nail bank robbers and murderers.

Working with a team of specialists on the third floor of the J. Edgar Hoover building in Washington, D.C., Giusti was in fact already creating DNA profiles of the New York terrorists from scraps of evidence left behind in hotel rooms and rental cars in the days before the attacks. A large basement room in the FBI building was filled with boxes of evidence, each piece stored in a brown paper bag. "It looks low tech," says Giusti, but the bags keep out humidity or dryness—"the two demons of DNA analysis." For DNA sleuths used to working with tiny scraps of genetic material, it was the mother lode: "fingernail clippings, chewing gum, hairbrushes, anything we could get dead skin off of," he says. When they swabbed the "friction areas" along the inside collars of shirts, the DNA came back mixed, an indication that the hijackers may have shared clothes. A few pieces of used tissue, tossed into a hotel room wastebasket, yielded clues, as did saliva from cigarette butts. Giusti mixed them with enzymes to release DNA—"like cracking the nut of a shell to get the meat out," he says. The "amplified" product—a few drops of clear, viscous liquid—was then put into a large machine that spits out lists of numbers, a genetic map unique to each individual.

It took more than a year for Giusti's lab to get back to New York with the results—a single page with 10 genetic codes. It was February 2003, and Shaler and his crew got to work on the numbers immediately. They were anxious to see if they could make a match to any of the unidentified remains they had retrieved. Shaler's deputy, Howard Baum, thought it would never work. How could they be sure that the clothing and tissues and cigarette butts were really those of the hijackers? "We had no idea where the profiles came from or how they were developed," says Baum. "I was skeptical." A scientist entered the codes into the lab's Mass Fatality Identification System. They told the computer to display any matches to the hijacker profiles in red. Immediately, there were two matches. Shaler and Baum were elated—they would be able to weed out at least some of the terrorists' remains after all. "Finding the first match was the big deal," says Baum. "It was proof of the concept—that we could identify the hijackers. Our job was not for the dead, it was for the living."

The red-flagged fragments "have been removed from the general population" of remains, says Ellen Borakove, spokeswoman for the New York medical examiner's office. "We will not discuss where they are."

Shaler and the other New York pathologists sent some of the most damaged human fragments to private forensics labs that specialize in advanced DNA-retrieval techniques. One was the Bode lab in Lorton, Va., which is known for extracting genetic material from bones. The New York team gave the lab a seemingly impossible challenge: to identify 12,000 burnt bone fragments. The bones "had been burning in the rubble at extreme temperatures," says Mike Cariola, the lab's director, "and we were only getting DNA samples on half the ones we tested." Cariola recalls that "some pieces of bone were so charred that if you held it with two fingers it would disintegrate." But using a new technique they developed that releases genetic material by removing calcium from bones, Cariola and his colleagues were able to get DNA profiles out of 2,000 samples that were previously unreadable. Cariola says the work resulted in at least 18 new identifications.

In September 2007 the medical examiner's office in New York announced it had identified a fourth set of terrorist remains —the 13th identified to date.

Some of the 9/11 families have been particularly vocal about singling out terrorist remains. "OK, you found these bastards, now take them out from the same place where our loved ones are," says John Cartier, whose younger brother James was on the 105th floor of the South Tower when it collapsed.

Cartier says he is just as certain about what should be done with those remains once the investigation is put to rest. He suggests "stomping on them." It isn't difficult to find others who share Cartier's visceral rage, undiminished with the years. New York Gov. David Paterson has his own idea: "finish burning them."

Yet some relatives of the dead take no comfort in doing imaginary harm to the bones of the terrorists. Diane Horning's 26-year-old son, Matthew, was on the 95th floor of Tower One. She says if the hijackers' families come forward, "I think they have a right to the remains, I really do. We are all entitled to burial according to our religion or conviction."

Islamic tradition prohibits cremation and calls for quick burial. Yet Imam Feisal Abdul Rauf, who leads a mosque 12 blocks from Ground Zero, says the hijackers themselves made that an impossibility: "It's hard to believe they expected their bodies would be whole and given a proper burial."

So far none of the hijackers' families have come forward to request the remains. Khaled Abou El Fadl, a law professor at UCLA and an authority on Islamic law, says he would be surprised if they did: "I've heard many times in the Muslim community that to claim and bury a body of one of the hijackers is to admit or accept that it was indeed those hijackers who committed 9/11."

Reached by NEWSWEEK, one relative of Ziad Jarrah, the hijacker believed to have piloted Flight 93 into a Pennsylvania field, expressed just this kind of ambivalence. "Of course we want to get back his remains, but we are not planning to make any contact before things get clarified," said the relative, who asked not to be named for fear of retaliation. He couldn't bring himself to admit that Jarrah had carried out the atrocities. "Maybe he participated," he says. "Maybe there is something we don't know." But then he paused. Perhaps, he conceded, his relative was indeed involved and he himself was just "engaging in wishful thinking." Admitting it outright, Professor El Fadl says, would run counter to the prevalent belief in countries like Saudi Arabia and Egypt that the attacks were actually an anti-Arab conspiracy perpetrated by the Bush administration. If he were related to one of the hijackers, he says, "I'd be scared for the harm that might befall the rest of my family by the Saudi or Egyptian government if I showed an interest," he says. "There is an environment of fear in countries like Saudi Arabia; it's hard to describe. The culture of terror is suffocating."

In June 2002, Miller, the Pennsylvania coroner, received a 4 a.m. phone call from a man in Lebanon who claimed he was the uncle of one of the hijackers. The man wanted to know why his nephew's remains hadn't been returned. "And I said, 'Well, we're not sure which one's which'," Miller recalls. "If he had any DNA material he could send me, I could cross-match like we did for the passengers and crew. Then I pointed out the FBI had custody of the remains—and that was the end of it." Would Miller have made the effort? He says the FBI has the final say, but as for him: "Absolutely," he says. "They are human beings that have passed away in the commonwealth just like my great granddad. I can't arbitrarily say who I will apply the law to ... The Good Lord will sort out their deeds."

As a religious matter, says Rauf, what happens to the remnants of the hijackers is not of great consequence. Muslims believe that "all souls will be judged" by God, he says. "What determines the state of your soul is your actions while you were alive." The problem of what to do with the hijackers, Rauf says, "is not so different from Mumbai, where the Indian Muslim community rejected the terrorists because they did not regard them as Muslim and would not give them a Muslim burial. My conviction is that the American Muslim community would reject the 9/11 hijackers." Even so, he believes that the remains should be returned. It would be, he says, an example of "the highest morals. This is what makes America great."

The FBI and the New York Medical Examiner's office, which holds them in secret and in silence, has no policy that dictates what will become of them. "They didn't want to bury them, and they certainly won't put them in the same memorial as the victims," says Baum, who now heads the New Jersey State Police crime lab. "Everyone is waiting because no one quite knows what to do." In the end, inertia and indecision may provide the most fitting final resting place for the remnants of the terrorists, lost to time and memory in some forgotten government vault, unnamed, unburied and unwanted.

Tags:

- [crash site, \(/topics/crash-site.html\)](/topics/crash-site.html)

- [New York City, New York, United States, \(/topics/new-york-city-new-york-united-states.html\)](/topics/new-york-city-new-york-united-states.html)
- [Imam Feisal Abdul Rauf, \(/topics/imam-feisal-abdul-rauf.html\)](/topics/imam-feisal-abdul-rauf.html)
- [New York, \(/topics/new-york.html\)](/topics/new-york.html)
- [Maryland, United States, \(/topics/maryland-united-states.html\)](/topics/maryland-united-states.html)
- [World Trade Center towers, \(/topics/world-trade-center-towers.html\)](/topics/world-trade-center-towers.html)
- [World Trade Center, \(/topics/world-trade-center.html\)](/topics/world-trade-center.html)
- [Somerset County, \(/topics/somerset-county.html\)](/topics/somerset-county.html)
- [Pentagon, \(/topics/pentagon.html\)](/topics/pentagon.html)
- [New York, United States, \(/topics/new-york-united-states.html\)](/topics/new-york-united-states.html)
- [Rockville, Maryland, United States, \(/topics/rockville-maryland-united-states.html\)](/topics/rockville-maryland-united-states.html)
- [Virginia, United States, \(/topics/virginia-united-states.html\)](/topics/virginia-united-states.html)
- [Federal Bureau of Investigation, \(/topics/federal-bureau-of-investigation.html\)](/topics/federal-bureau-of-investigation.html)
- [Pennsylvania, United States, \(/topics/pennsylvania-united-states.html\)](/topics/pennsylvania-united-states.html)
- [Product Issues, \(/topics/product-issues.html\)](/topics/product-issues.html)
- [Armed Forces DNA Identification Laboratory, \(/topics/armed-forces-dna-identification-laboratory.html\)](/topics/armed-forces-dna-identification-laboratory.html)
- [U.S. News \(/us-news.html\)](/us-news.html)

© 2013 The Newsweek/Daily Beast Company LLC